

10/519096

DT01 Rec'd PCT/PTC 27 DEC 2004
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. :

U.S. National Serial No. :

Filed :

PCT International Application No. : PCT/FR2003/001956

VERIFICATION OF A TRANSLATION

I, Charles Edward SITCH BA,

Deputy Managing Director of RWS Group Ltd UK Translation Division, of Europa House,
Marsham Way, Gerrards Cross, Buckinghamshire, England declare:

That the translator responsible for the attached translation is knowledgeable in the French language in which the below identified international application was filed, and that, to the best of RWS Group Ltd knowledge and belief, the English translation of the international application No. PCT/FR2003/001956 is a true and complete translation of the above identified international application as filed.

I hereby declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application issued thereon.

Date: December 21, 2004

Signature :



For and on behalf of RWS Group Ltd

Post Office Address :

Europa House, Marsham Way,

Gerrards Cross, Buckinghamshire,

England.

DT01 Rec'd PCT/PTC 27 DEC 2004

Use of isoflavones for preparing topical compositions for promoting slimming, and related cosmetic treatment method.

5 The present invention relates to the use of isoflavones for the preparation of topical compositions that are useful for promoting slimming, and to the related cosmetic treatment method.

10 In the context of the present invention, slimming is preferentially a case of fighting localized excess weight.

This localized excess weight appears in the form of fat, the amount and distribution of which differ according to the sex. Thus, adipose tissue represents 20 to 30% of the body weight in women and 10 to 15% in men. Subcutaneous fat is twice as thick in women as in men. In men, fat accumulates around and above the waistline (android distribution, metabolic risk factor) and below the waistline, in the gluteo-femoral region in women (gynoid distribution, not correlated with a vascular risk). One of the characteristics of this accumulated lower body fat is that it is difficult to mobilize. It is intended to ensure the energetic needs of reproduction (pregnancy and, above all, breastfeeding) and thus constitutes the largest energy reservoir in the body.

30 At the cellular level, adipocytes are spherical cells whose intracellular space is occupied by a large vacuole filled with triglycerides. The adipocytes can change rapidly in volume. Specifically, depending on the circumstances, these cells may reach 40 μm to 35 120 μm in diameter, which corresponds to a 27-fold increase in volume. In certain extreme cases, this increase may be up to 40-fold. Thus, the adipocyte is the main energy factor in the body since it is capable

of rapidly storing (uptake or lipogenesis) or, conversely, mobilizing (lipolysis) the triglycerides, which are the main energy sources of the body.

5 Lipogenesis proceeds via the synthesis of triacylglycerols, which result from the esterification of glycerol 3-phosphate with activated fatty acids; conversely lipolysis corresponds to the hydrolysis of the stored triacylglycerols, to glycerol and fatty
10 acids. Various mechanisms have been brought to light, which control lipolysis and lipogenesis and involve, for example, receptors such as the alpha-2 and/or beta-1 and -2 receptors, the type A1 adenosine receptors, the prostaglandin E2, Y2 of YY type and the
15 neuropeptide NPY receptors, but also sexual hormones.

Thus, the knowledge of the mechanisms controlling adipocyte lipolysis and lipogenesis has been very markedly improved. However, slimming active agents are
20 still sought, since the known slimming active agents are not entirely satisfactory. There is thus at the present time a genuine demand to develop topical compositions for efficiently promoting slimming.

25 Two major types of slimming active agents are known: lipolytic agents (acting on the removal of the excess lipids) and liporeducing agents (combating the formation of fat).

30 a) **Lipolytic agents**

- Caffeine (which is found in many plants: green tea, guarana seeds): inhibits phosphodiesterase, thus ensuring an optimum intracellular level of cAMP, stimulates the β receptors and inhibits the
35 lipoprotein lipase;
- rhodosterol (extract of a red alga): activates the α receptors and promotes the penetration of caffeine;
- palmitoyl-carnitine: accelerates the combustion of

fatty acids; by improving their uptake by the mitochondria;

- alpha and gamma bioactive agents (derived, respectively, from a marine bacterium and a fungus): block the α 2 and NPY receptors;
- escin and ginkgo biloba: α 2 blockers;
- sphingosine: limits the penetration of glucose;

b) Liporeducing agents

- *Andiroba* (triterpenes) and *Carcina cambogia*: block the conversion of the preadipocytes into adipocytes;
- rutin: (extracted from *Ruta graveolens*): isolates glucose and prevents it from combining with free fatty acids.

To these specific active agents may be added anti-infiltration active agents and venotonic agents, which are often combined with slimming active agents.

20

Anti-infiltration active agents:

- ❖ Viburnum (draining, decongesting, active caffeine effect, free-radical scavenging, firming)
- ❖ Anti-inflammatory, anti-edematous, analgesic
- 25 ❖ Arnica (anti-edematous, calmative)
- ❖ Mouseear hawkweed (free-radical scavenging, accelerates draining)
- ❖ Wild pansy (important role in water balance)
- ❖ Fucus vesiculosus (anti-edematous, calmative)

30

Venotonic agents:

- ❖ Ruscus (vitamin P action, vascular tonic)
- ❖ Ginkgo biloba (fights vascular and capillary stasis)
- 35 ❖ Escin (improvement in venous tonus, modifies the capillary permeability)

Finally, formulations comprising these known slimming active agents can be complemented with restructuring

and smoothing active agents that fight sagging of the skin.

It has now been found that the application of a topical
5 composition comprising one or more isoflavones has a
slimming action and makes it possible especially to
fight localized excess weight.

Patent application WO 01/64177 (Henkel KGAA) discloses
10 the use of a composition comprising a flavone, an
isoflavone, or glycosyl and optionally a substance for
stimulating and/or depolarizing the nerve fibers, for
the cosmetic treatment of cellulite or firming of the
skin.

15 In the article Cosmetics, D. Schmid et al., SÖFW-
Journal, 127. Jahrgang 10-200, "Genisteine, a new
cosmetic ingredient derived from soy", the anti-
cellulite action of certain isoflavones is described.
20 However, cellulite is a condition that is quite
different from localized excess weight.

Thus, cellulite is defined as a localized metabolic
disorder of the subcutaneous tissues that causes an
25 impairment in the shape of the body. Conversely, excess
weight is caused by hypertrophy or hyperplasia of the
adipocytes (increase in lipogenesis), or a reduction in
lipolysis. The cellulite-slimming differentiation also
appears in view of the fact that cellulite affects the
30 dermis (subcutaneous tissue) of women only, whereas
excess weight (the adipocytes) affects both sexes.
Furthermore, cellulite appears in women even without
excess weight; it is a problem of dermal/hypodermal
architecture.

35 Patent application EP 829 261 relates to compositions
comprising isoflavones for their weight-reducing effect
via the degradation of fat accumulated in the fat
cells. However, the topical mode of administration is

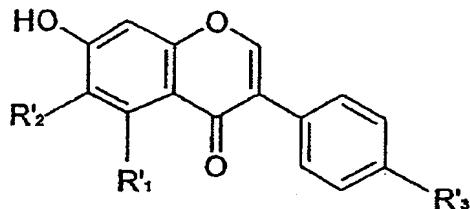
not mentioned in said patent application.

One subject of the present invention is thus the use of isoflavones for the preparation of topical compositions
5 that are useful for promoting slimming, and the related cosmetic treatment method.

The "isoflavones" that may be used according to the present invention may be natural substances extracted
10 from natural products, especially from plants such as soybean, clover, lupin, apple seeds, etc. The topical compositions according to the present invention quite often contain, as isoflavones, a mixture of different isoflavones, but they may also be present in pure form
15 in the context of the present invention. Moreover, the aglycone forms of the isoflavones and the glycosylated forms thereof are distinguished. These various forms are usually found as a mixture. They are illustrated by the following formulae.

20

Aglycone forms, of formula:

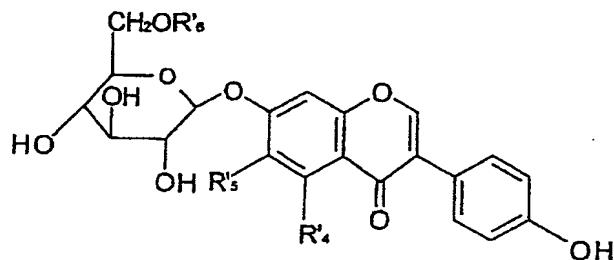


in which R'₁ represents a hydrogen atom or a hydroxyl group, R'₂ represents a hydrogen atom or a methoxy group and R'₃ represents a hydroxyl group.
25

Advantageously, according to the present invention, R'₁, R'₂ and R'₃ represent:

30	<u>R'</u> ₁	<u>R'</u> ₂	<u>R'</u> ₃	<u>Compound name</u>
	H	H	OH	daidzein
	OH	H	OH	genistein
	H	OCH ₃	OH	glycitein

35 Glycosylated forms, of formula:



in which R'₄ represents a hydrogen atom or a hydroxyl group, R'₅ represents a hydrogen atom or a methoxy group and R'₆ represents a hydrogen atom.

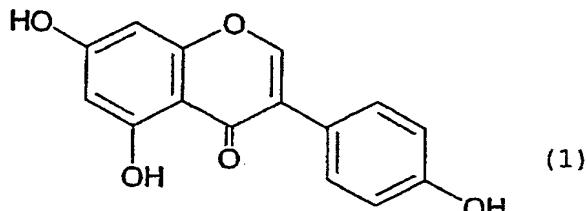
5

Advantageously, according to the present invention, R'₄, R'₅ and R'₆ represent:

	<u>R'</u> ₄	<u>R'</u> ₅	<u>R'</u> ₆	<u>Compound name</u>
10	H	H	H	daidzine
	OH	H	H	genistin
	H	OCH ₃	H	glycitin

The glycosylated forms of the isoflavones are the ones
15 that are the most abundant in nature.

The isoflavones that are preferred are the natural isoflavones such as genistein (1), daidzein or glycitein.



20

In particular, genistein, or 4,5,7-trihydroxyisoflavone, which may be used according to the present invention may be a product of plant origin and
25 especially from soybean, with a titer of 85% to 90% by weight of genistein, especially the product sold by the company Buckton Scott under the name "85%-titer genistein".

The isoflavones may be used alone or as a mixture in the context of the present invention.

The topical application of a composition of one or more
5 isoflavones may prove to be particularly advantageous in the case of pregnant women or women who have given birth within 6 months. A subject of the present invention is thus also a cosmetic treatment method for promoting slimming and especially for fighting
10 localized excess weight in pregnant women or women who have given birth within 6 months. Specifically, one of the advantages of the compositions that may be used in the context of the present invention is that the presence of alcohol, which is contraindicated for
15 pregnant and breastfeeding women on account of its toxicity, is not necessary. Specifically, caffeine, a very commonly used slimming agent, requires dissolution in alcohol, which is thus avoided in the context of the present invention.

20 According to the present invention, the terms "slimming" and "fighting localized excess weight" mean an action making it possible to avoid or at the very least reduce the formation of subcutaneous fat as
25 described previously. This action is especially reflected by a reduction in unsightly excesses or reserves, by refining the silhouette, by accelerating the removal of excesses, and by a better definition of the contour of the body or alternatively a resculptured
30 silhouette.

According to the present invention, the expression "cosmetic treatment method for fighting localized excess weight" means the use of a cosmetic treatment
35 that makes it possible to visibly measure the action described above.

Thus, a topical composition comprising one or more isoflavones used according to the invention may be

applied to the areas of skin liable to form this localized excess weight, namely areas where these excesses have already formed or are in the process of being formed.

5

By way of example, a composition containing genistein that may be used in the context of the present invention may contain between 0.0085% and 8.5% of genistein by weight relative to the total weight of the 10 composition, i.e. for a solution with an 85% to 90% by weight titer of genistein, between 0.01% and 10% by weight of this solution relative to the total weight of the composition.

15 More generally, a composition containing one or more isoflavones that may be used in the context of the present invention may contain between 0.01% and 10%, and preferably from 0.1% to 3%, by weight of isoflavone(s) relative to the total weight of the 20 composition.

The composition that allows the invention to be implemented comprises a cosmetically acceptable support, i.e. a support that is compatible with the 25 skin, and may be in any galenical form normally used for topical application, especially in the form of an aqueous, aqueous-alcoholic or oily solution, an oil-in-water or water-in-oil or multiple emulsion, an aqueous or oily gel, a liquid, pasty or solid anhydrous 30 product, a dispersion of oil in an aqueous phase with the aid of spherules, these spherules possibly being polymer nanoparticles such as nanospheres and nanocapsules or better still lipid vesicles of ionic and nonionic type.

35

This composition may be more or less fluid and may have the appearance of a white or colored cream, an ointment, a milk, a lotion, a serum, a paste, a mousse or a gel.

It may optionally be applied to the skin in the form of an aerosol. It may also be in solid form, for example in the form of a stick.

5

The composition of the invention may also contain adjuvants that are common in cosmetics, such as hydrophilic or lipophilic gelling agents, hydrophilic or lipophilic active agents, preserving agents, 10 antioxidants, solvents, fragrances, chelating agents, odor absorbers and dyestuffs. The amounts of these various adjuvants are those conventionally used in the fields under consideration, for example from 0.01% to 20% of the total weight of the composition. Depending 15 on their nature, these adjuvants may be introduced into the fatty phase, into the aqueous phase, into lipid vesicles or into nanoparticles.

When the composition of the invention is an emulsion, 20 the proportion of the fatty phase may range from 5% to 80% and preferably from 5% to 50% by weight relative to the total weight of the composition. The oils, emulsifiers and coemulsifiers used in the composition in emulsion form are chosen from those conventionally 25 used in the field under consideration. The emulsifier and coemulsifier are present in the composition in a proportion ranging from 0.3% to 30% and preferably from 0.5% to 20% by weight relative to the total weight of the composition.

30

As oils that may be used in the compositions for implementing the invention, mention may be made of mineral oils, oils of plant origin (apricot oil, sunflower oil or plum oil), oils of animal origin, 35 synthetic oils, silicone oils and fluoro oils (perfluoropolyethers). Fatty alcohols (cetyl alcohol), fatty acids and waxes (beeswax) may also be used as fatty substances.

As emulsifiers and coemulsifiers that may be used in the invention, examples that may be mentioned include fatty acid esters of polyethylene glycol, such as PEG-40 stearate and PEG-100 stearate, and fatty acid esters of polyols, such as glyceryl stearate and sorbitan tristearate.

Hydrophilic gelling agents that may be mentioned in particular include carboxyvinyl polymers (carbomer), acrylic copolymers such as acrylate/alkylacrylate copolymers, polyacrylamides, polysaccharides, natural gums and clays, and lipophilic gelling agents that may be mentioned include modified clays, for instance bentones, metal salts of fatty acids, hydrophobic silica and polyethylenes.

The composition used according to the invention may contain other active agents with a slimming action, for instance the lipolytic agents and liporeducing agents as described in the introduction.

The invention thus relates to the use of isoflavones for the preparation of topical compositions that are useful for promoting slimming and especially for fighting localized excess weight, characterized in that one or more isoflavones and also one or two slimming active agents of lipolytic type and/or one or two slimming active agents of liporeducing type are applied, simultaneously, separately or sequentially over time.

The slimming active agent of lipolytic type may be chosen from: caffeine, rhodysterol, palmitoylcarnitine, alpha and gamma bioactive agents, escin, ginkgo biloba and sphingosine. The slimming active agent of liporeducing type may be chosen from: andiroba, Garcinia cambogia and rutin.

One or two anti-infiltration or venotonic active agents

may also be applied simultaneously, separately or sequentially over time in addition to the application of the composition used according to the invention. The anti-infiltration or venotonic active agents may be
5 chosen from: viburnum, ivy, arnica, mouseear hawkweed, wild pansy, *Fucus vesiculosus*, *Ruscus*, ginkgo biloba and escin.

The composition used according to the invention may
10 also comprise other active agents, such as:

- an extract of *Sophora japonica* flowers: this extract is rich in flavanoids (free-radical-scavenging) and in rutin. This active agent
15 promotes the capillary circulation, facilitating and activating the draining and anti-infiltrations of tissues;
- extract of *Centella asiatica*: extract of *Centella*, a plant originating from east Africa and from Madagascar. This active agent contains terpenes (asiaticosides, asiatic acid and madecassic acid) with draining, anti-infiltration and firming properties on tissues. It is especially used in
25 slimming products, but also in anti-stretch mark, anti-wrinkle and siccating products; 0 to 5% extract of *Centella* may thus be present in a slimming composition;
- 30 - "Hydrolyzed Soy Protein": soy protein, which is an elastoregulator. These soy peptides may be any peptide obtained by hydrolysis of proteins extracted from soy, according to operating conditions known to those skilled in the art, in other words any soy protein hydrolysate. Soy peptides, which are described in patent application WO 00/19974, are particularly suitable for introduction into the compositions used in the context of the present invention. This active
35

agent allows restoration of the mechanisms of cell renewal, activates the synthesis of the structural components of the extracellular matrix and has a restructuring, regenerating and firming action; 5 0 to 5% soy protein may thus be present in a slimming composition;

10 - anti-wrinkle active agents, among which mention may be made of avocado furans, retinol and its derivatives, vitamin C or unsaponifiable matter from soy, etc.

15 The combination of the two active agents: isoflavone taken alone or as a mixture, and extract of *Sophora japonica* flowers, is particularly preferred and a composition containing this combination forms part of the invention. Such a composition may contain from 0.01% to 20% of extract of *Sophora japonica* flowers.

20 The examples that follow illustrate the present invention.

Example 1: Restructuring gel

Ingredients (INCI - EU)	% w/w
Aqua	qsp
PEG-6	3.6000
Butylene glycol	2.7000
Dextrin	1.8600
Phenyl trimethicone	1.2000
Acrylates/C10-30 alkyl acrylate crosspolymer	0.6000
Preservative system	qsp
Dimethicone/phenyl vinyl dimethicone crosspolymer	0.3000
Fragrance	qs
<i>Sophora japonica</i> flower extract	0.01 to 20
Xanthan gum	0.1500

PPG 26-Buteth-26	0.1100
Genosten® 4000 ⁽¹⁾	1 to 10
Hydrolyzed soy protein	0.1000
Glucose	0.0800
PEG 40 hydrogenated castor oil	0.0700
Sorbitol	0.0400
Centella asiatica extract	0.01 to 5
Citric acid	0.0200
Enteromorpha compressa extract	0.01 to 5
Colorant	qs
Sodium hydroxide	qsp pH = 4.5 to 6.5

qs = quantity sufficient

qsp = quantity sufficient for

⁽¹⁾ sold by the company Nutrinov

5. Isoflavone-rich soy extract obtained by physical extraction:

4% isoflavones including:

Daidzine:	0.28 g
O. Malonyl daidzine:	0.93 g
Genistine:	0.28 g
O. Malonyl genistine:	2.50 g
Genistein:	0.02 g
Daidzein:	0 g

15 Example 2: Restucturing gel

Ingredients (INCI - EU)	% w/w
Aqua	qsp
PEG-6	3.6000
Butylene glycol	2.7000
Dextrin	1.8600
Phenyl trimethicone	1.2000
Acrylates/C10-30 alkyl acrylate crosspolymer	0.6000
Preservative system	qsp
Dimethicone/phenyl vinyl dimethicone crosspolymer	0.3000

Fragrance	qs
<i>Sophora japonica</i> flower extract	0.01 to 20
Xanthan gum	0.1500
PPG 26-Buteth-26	0.1100
4,5,7-trihydroxyisoflavone	0.01 to 10
Hydrolyzed soy protein	0.1000
Glucose	0.0800
PEG 40 hydrogenated castor oil	0.0700
Sorbitol	0.0400
<i>Centella asiatica</i> extract	0.01 to 5
Citric acid	0.0200
<i>Enteromorpha compressa</i> extract	0.01 to 5
Colorant	qs
Sodium hydroxide	qsp pH = 4.5 to 6.5

qs = quantity sufficient

qsp = quantity sufficient for

Example 3: oil-in-water cream

5

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Squalane	5.00
Petrolatum	5.00
Glycerin	5.00
Isodecyl neopentanoate	5.00
Pentaerythrityl tetraethylhexanoate	5.00
Cyclomethicone	4.00
Cetearyl alcohol	3.00
Myristyl myristate	2.00
Laureth-23	2.00
Silica	2.00
Heptadecadienyl furan	0.1 to 10
Beeswax	1.00
Sclerotium gum	1.00
PEG-6	1.00
Polyacrylamide	0.80
Glyceryl stearate	0.70

Dimethiconol	0.70
Cetearyl glucoside	0.60
C13-14 isoparaffin	0.40
Citric acid	0.14
Laureth-7	0.10
Quimdis mixture ⁽²⁾	0.01 to 10
Caffeine	0.1 to 10
<i>Enteromorpha compressa</i> extract	0.01 to 5
<i>Garcinia cambogia</i> extract	0.01 to 10
<i>Ginkgo biloba</i> extract	0.01 to 10
<i>Sophora japonica</i> flower extract	0.01 to 20
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

⁽²⁾ sold by the company Quimdis

Mixture of isoflavones between 7 and 17%

- 5 4 to 8% daidzein glycosides
- 2 to 5% glyciteine glycosides
- 1 to 4% genistein glycosides

Example 4: oil-in-water cream

10

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Squalane	5.00
Petrolatum	5.00
Glycerin	5.00
Isodecyl neopentanoate	5.00
Pentaerythrityl tetraethylhexanoate	5.00
Cyclomethicone	4.00
Cetearyl alcohol	3.00
Myristyl myristate	2.00
Laureth-23	2.00
Silica	2.00
Heptadecadienyl furan	0.1 to 10

Beeswax	1.00
Sclerotium gum	1.00
PEG-6	1.00
Polyacrylamide	0.80
Glyceryl stearate	0.70
Dimethiconol	0.70
Cetearyl glucoside	0.60
C13-14 isoparaffin	0.40
Citric acid	0.14
Laureth-7	0.10
4,5,7-Trihydroxyisoflavone	0.01 to 10
Caffeine	0.1 to 10
<i>Enteromorpha compressa</i> extract	0.01 to 5
<i>Garcinia cambogia</i> extract	0.01 to 10
<i>Ginkgo biloba</i> extract	0.01 to 10
<i>Sophora japonica</i> flower extract	0.01 to 20
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

Example 5: water-in-oil cream

. 5

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Hydrogenated polyisobutene	7.00
Isocetyl stearate	7.00
Cyclomethicone	4.80
Glycerin	4.00
Mineral oil	3.00
Zinc oxide	3.00
Butylene glycol	2.00
Isononyl isononanoate	2.00
Beeswax	2.00
Cetyl dimethicone copolyol	1.70
Polyglyceryl-4 isostearate	1.65
Hexyl laurate	1.65

Disodium tartrate	1.60
Sodium chloride	1.00
PEG-6	1.00
4,5,7-Trihydroxyisoflavone	0.01 to 10
Retinyl palmitate	0.01 to 10
<i>Enteromorpha compressa</i> extract	0.01 to 5
<i>Sophora japonica</i> flower extract	0.01 to 20
<i>Centella asiatica</i> extract	0.01 to 5
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

Example 6: lipstick

5

Ingredients (INCI - EU)	% w/w
Castor oil	qsp
Oleyl alcohol	20.00
Hydrogenated palm kernel oil	17.00
Candelilla wax	11.00
Polyglyceryl-3 beeswax	10.00
Mineral oil	9.57
Heptadecadienyl furan	0.1 to 1
4,5,7-Trihydroxyisoflavone	
quaternium-18 hectorite	0.01 to 1.10
Titanium dioxide	1.00
Tocopheryl acetate	0.50
Propylene carbonate	0.33
Fragrance	qs
Retinol	0.01
<i>Enteromorpha compressa</i> extract	0.01 to 5
<i>Sophora japonica</i> flower extract	0.01 to 20
<i>Centella asiatica</i> extract	0.01 to 5
Hydrolyzed soy protein	0.01 to 10

qs = quantity sufficient

qsp = quantity sufficient for

Example 7: cream gel

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Cyclomethicone	5.40
Octyl palmitate	5.00
Hydrogenated cocoglycerides	3.00
Arachidyl behenyl alcohol	2.55
Propylene glycol	2.50
Isodecyl neopentanoate	2.00
Glyceryl stearate	1.70
Cetyl alcohol	1.30
Stearic acid	1.00
PEG-6	1.00
Beeswax	0.40
C13-14 isoparaffin	0.40
Butylene glycol	0.16
Glycerin	0.16
Cetearyl alcohol	0.10
Cetyl palmitate	0.10
Cocoglycerides	0.10
Laureth-7	0.10
Novasoy mixture ⁽³⁾	0.01 to 10
Enteromorpha compressa extract	0.01 to 5
Sophora japonica flower extract	0.01 to 20
Centella asiatica extract	0.01 to 5
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

5 ⁽³⁾ sold by the company ADM

Mixture of isoflavones at 30% minimum

Genistein/diadieline/glycitine ratio: 1.3/1.0/0.3

Dosage example: genistein: 20.80%

 glycitine: 3.80%

10 daidzein: 12.00%

Example 8: cream gel

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Cyclomethicone	5.40
Octyl palmitate	5.00
Hydrogenated cocoglycerides	3.00
Arachidyl behenyl alcohol	2.55
Propylene glycol	2.50
Isodecyl neopentanoate	2.00
Glyceryl stearate	1.70
Cetyl alcohol	1.30
Stearic acid	1.00
PEG-6	1.00
Beeswax	0.40
C13-14 isoparaffin	0.40
Butylene glycol	0.16
Glycerin	0.16
Cetearyl alcohol	0.10
Cetyl palmitate	0.10
Cocoglycerides	0.10
Laureth-7	0.10
4,5,7-Trihydroxyisoflavone	0.01 to 10
Enteromorpha compressa extract	0.01 to 5
Sophora japonica flower extract	0.01 to 20
Centella asiatica extract	0.01 to 5
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

Example 9: spray

Ingredients (INCI - EU)	% w/w
Aqua	qsp
Glycerin	4.00
Montmorillonite	3.00

PEG	3.00
Glycine	0.30
Citric acid	0.09
4,5,7-Trihydroxyisoflavone	0.01 to 10
<i>Enteromorpha compressa</i> extract	0.01 to 5
<i>Sophora japonica</i> flower extract	0.01 to 20
<i>Centella asiatica</i> extract	0.01 to 5
Hydrolyzed soy protein	0.01 to 10
Preservative system	qs
Fragrance	qs

qs = quantity sufficient

qsp = quantity sufficient for

5 **Example 10:** Summary of the test of use of the restructuring gel according to example 1

It was sought in this test to assess the efficacy and acceptability of the restructuring gel according to
10 example 1, after repeated applications, twice a day over a period of 8 weeks, under the normal conditions of use, by a group of 92 to 100 consumers who had given birth within 3 months and/or whose body skin (midriff and thighs) had excess fat.

15

PANELISTS

The analysis of the results related to a panel of 92 (T 2 months) to 100 (T 1 month) consumers, the physical characteristics of which are given below.

20

Panel at T 1 month (100 consumers)

Age	Nature of the body skin	"Sensitive" skin
19 to 49 years old (average: 30 years old)	- dry: 44% - normal: 36% - dry-normal combination: 20%	35%

It should be noted that 48 panelists had just been

through their first pregnancy, 44 had had previous pregnancies numbering 2 (23), 3 (20) and 4 (1).

Panel at T 2 months (92 consumers)

Age	Nature of the body skin	"Sensitive" skin
19 to 49 years old (average: 30 years old)	- dry: 45% - normal: 33.7% - dry-normal combination: 20%	37%

5

It should be noted that 48 panelists had just been through their first pregnancy, and that 40 had had previous pregnancies numbering 2 (21) or 3 (19).

10

PROTOCOL

15 The restructuring gel studied was applied twice a day on average (morning and evening), for 1 to 2 months, to the body (thighs, hips, midriff and buttocks in particular), by the consumers, at home, under the normal conditions of use, instead of the product they generally used.

20 The questionnaires, adapted to the nature of the product, were filled in at the end of the test (T1 and T2 months) and then mailed in, and especially included the questions listed below relating to the action of fighting excess weight.

25 The restructuring gel according to example 1, applied for 2 months by the 92 to 100 women described above was found particularly favorable, since 87% of the panelists judged it as overall "pleasant" to "very pleasant" and 67% judged it as overall "good" to "very good". The performance characteristics below were demonstrated.

Performance	Effects at T 1 month	Effects at T 2 months
	(100 consumers)	(92 consumers)
Expressed as % of the panel		
Reduced unsightly excesses	76	86
Reduced unsightly reserves	70	80
Refined silhouette	75	87
"Accelerates" the removal of excesses	74	86
Models the body	70	90
Body contours better defined	77	68
The silhouette is resculptured	60	-